

A STUDY TO ASSESS THE LEVEL OF KNOWLEDGE REGARDING BLOOD DONATION AMONG STUDENTS OF ART & SCIENCE AT SELECTED COLLEGE, COIMBATORE

Dr. S. PARIMALA¹ & R. DEEPA²

¹Research Supervisor, Vinayaka Mission's Annapoorana College of Nursing,

Vinayaka Mission's Research Foundation, Salem, Tamil Nadu, India

²Research Scholar, Vinayaka Mission's Research Foundation, Salem, Tamil Nadu, India

ABSTRACT

A study to assess the level of knowledge regarding blood donation among students of Art & Science at selected college, Coimbatore. Convenient sample of 100 samples were selected for this study. Data collection was conducted to assess the level of knowledge regarding blood donation by using structured questionnaire. Informational booklet was given to sample. Result reveals non-professional students need to know about the blood donation.

KEYWORDS: Blood Donation & Informational Booklet

Received: Dec 04, 2019; **Accepted:** Dec 24, 2019; **Published:** Feb 08, 2020; **Paper Id.:** IJMPSFEB20202

INTRODUCTION

Give blood, Give life. Blood donation is everyone's responsibility in one's life to serve humanity. Blood donation is an essential aspect of every citizen of India. Everyone is marching towards health. It can be achieved by following the different treatment modalities. It is hard to be healthy in this present scenario.

Because of modernization, industrialization and luxurious life, people confront many issues. They face obstacles due to hectic schedule. We cannot predict the life expectancy now-a-days.

Every minute of every day, someone is in need of blood (donation). Generally, everyone should be healthy and wish no one is in need blood ever! But practically think of those who die every day due to non-availability of blood on time. [11]

Ashish Kumar Nathabhai Kanani, Jitendra H. Vachhani, Shweta B. Upadhyay, Spruha K. Dholakiya (2018) conducted a study on knowledge and awareness about blood donation among students in Jamnagar, Gujarat'. A random cross-sectional study was conducted among 500 government medical sciences' undergraduate students in Jamnagar during the period of three months (February 2017 - April 2017). The response was gathered from a total of 500 respondents, who voluntarily participated in the study. Results indicate a greater awareness among the medical and physiotherapy students in comparison to nursing, dental and ayurvedic students. [5]

NEED FOR THE STUDY

"Blood transfusion saves lives and improves health," A single donation from you can save many lives and this is where you can take the "FIRST STEP". Blood donation is an important aspect to teach the eligible persons and ask

them to help in times of need. There are many apps available to help the needy people on time without money.

Donating blood not only saves multiple lives but also gives an opportunity to add value to your life. It helps in reducing the risk of damage to liver and pancreas, improving cardiovascular health and reducing obesity.

Objectives of the Study

- Assess the level of knowledge regarding blood donation among students of Art & Science.
- Provide an informational booklet on blood donation to students of Art & Science.

OPERATIONAL DEFINITION

Assess: It helps to assess the level of knowledge of blood donation among students of Art & Science.

Knowledge: It refers to the response of the students on blood donation by structured questionnaire. It has 25 objective type questions, and the total knowledge score is 25.

Blood Donation: It is when a person voluntarily gives blood, which can be used for blood transfusions.

Art & Science: It refers to an interdisciplinary degree, which studies about human concepts, and to which the students voluntarily get admitted after higher secondary education.

REVIEW OF LITERATURE

Literature is an essential component of the investigator for a greater understanding of the research problem and its major aspect.

Dawit Malako, Fissehatsion Yoseph & Mebratu Legesse Bekele (2019) conducted the cross-sectional study on assessment of knowledge, attitude and practice, and associated factors of blood donation among health care workers in Ethiopia. An institution-based cross-sectional study was conducted among 218 WSUTRH health care workers. Socio-demographic characteristics and data related to the levels of KAP of participants were collected using a self-administered questionnaire. 218 health care workers were involved in the study, among which 129 (59.2%) were males and 89 (40.8%) were females. Among the study participants, 180(82.6%) had good knowledge, but only 128(58.7%) were found to have a good attitude as 126(57.8%) reported that a voluntary donor is the best source of blood donation. Regrettably, only 47(21.6%) of the respondents were found to practice blood donation in their lifetime. Knowledge and attitude levels of the participants were not found to be significantly associated with socio demographic parameters study; but, only sex of the participants had revealed statistically significant association with blood donation practice, where the males were more likely to donate blood than the females (AOR = 2.59 (1.22 – 5.49)). Healthcare workers, blood banks and the hospitals are demanded to design ways to update knowledge and build its physio-psychological benefits and make the services more accessible.

Research Methodology

The chapter deals with the description of the research approach, research design, research setting, population, sample and sampling technique, criteria for sample selection, variables of the study, tools for data collection, procedure for data collection, plan for data analysis and ethical consideration.

Research Approach

Quantitative research approach was adopted for the study.

Research Design

Descriptive research design was adopted in this study.

Setting

The study was conducted in a selected college, Coimbatore. It is located at Punjai Puliampatti.

Population

In this study, the population consists of first year student of Art & Science College.

Sampling and Sample Size

A total of 100 students were selected for the study using convenient sampling technique.

CRITERIA FOR SAMPLE SELECTION

Inclusion Criteria

- Students who are studying in Ayyan Thiruvalluvar College of Art & Science.
- Students who are first year students of Art & Science.
- Students who are in the age group between 17 and 24 years.
- Both genders' samples.

Exclusion Criteria

Students of training institute.

INSTRUMENT AND TOOL USED FOR DATA COLLECTION

Section A: It consists of demographic profile of the samples.

Section B: Structured interview questionnaire was used to assess the level of knowledge on blood donation. It consists of 25 questions.

Score Interpretation

<50% = inadequate knowledge.

51 - 75% = moderately adequate knowledge.

> 75% = adequate knowledge.

Techniques of Data Analysis and Interpretation

Descriptive statistics was applied for the analysis of demographic variables and level of knowledge regarding blood donation.

DATA ANALYSIS AND INTERPRETATION

Table 1: Age Distribution of Sample

[n = 100]

Sl. No.	Age in Years	No. of Respondents	
		Frequency	Percentage (%)
1	17–20 years	98	98
2	21–24 years	2	2
3	>24 years	-	

Table 1 reveals that majority, 98%, of the samples were aged between 17 and 20 years, 2(2%) were in the age group between 21 and 24 years.

Table 2: Gender Distribution of Sample

S. No.	Gender	Frequency	Percentage (%)
1	Male	52	52
2	Female	48	48

Table.2 displays that majority 52(52%) of the samples belong to males and remaining 48(48%) of samples belong to females.

Table 3: Distribution of Patients based on Educational Status

Sl. No.	Educational Status	Frequency	Percentage(%)
1	Undergraduate	100	100
	Post-graduate	-	-

Table 3 reveals that samples were graduate students of Arts & Science.

Table 4: Distribution of Samples based on Religion

Sl. No.	Religion	Frequency	Percentage(%)
1	Hinduism	93	93
2	Christianity	6	6
3	Islam	1	1

Table 4 portrays that 93% of samples belong to Hinduism and 6% of samples belong to Christianity and 1% of the sample belong to Islam.

Table 5: Distribution of Samples based on Marital Status

Sl. No.	Marital status	Frequency	Percentage (%)
1	Married	-	-
2	Unmarried	100	100

Table 5 represented that 100% of samples were single.

Table 6: Type of Family Distribution among Samples

S. No.	Type of Family	Frequency	Percentage (%)
1	Nuclear family	82	82
2	Joint family	18	18

Table 6 revealed that 82% of samples belong to nuclear family and 18% of samples belong to joint family.

Table 7: Family Monthly Income of Parents of Sample

Sl. No.	Monthly income/ Month or Year	Frequency	Percentage (%)
1	5000–10000	26	26
2	10001–20000	54	54
3	20001 & above	20	20

Table 7 reveals that majority, 54%, of samples had a monthly income between Rs. 10,001 and 20,000, 26% of samples had a monthly income between Rs. 5,000 and 10,000 and 20% of samples had a monthly income between Rs. 20,001 & above.

Table 8: Residential Distribution of Samples

Sl. No.	Residence	Frequency	Percentage (%)
1	Urban area	-	-
2	Rural area	100	100

Table 8 portrays that 100% of patients belong to rural area.

Table 9: Number of Siblings of Samples

Sl. No.	Family History	Frequency	Percentage (%)
1	Nil	29	29
2	One	46	46
3	Two	14	14
4	More than Two	11	11

Table 9 reveals that 46% of samples had one sibling, 14% of samples had more than two siblings and 11% samples had more than two siblings.

Analysis of the Level of Knowledge on Blood Donation

Table10: Analysis on the Level of Knowledge on Blood Donation Among samples

Sl. No.	Level of Knowledge	Frequency	Percentage (%)
1	Inadequate (<50%)	82	82
2	Moderately adequate (51–75%)	17	17
3	Adequate (>75%)	1	1

Table 10 reveals that 17% of the samples had moderately adequate level of knowledge regarding blood donation, 1% of samples had more than adequate level of knowledge and 82% of the samples had inadequate level of knowledge.

RESULTS AND DISCUSSIONS

Demographic Variables of Samples

- In this present study, 100 samples were selected based on the **age** criteria. Age distribution reveals that 98% of the samples were aged between 17 and 20 years. The gender of patients reveals that majority, 52(52%), of samples were male.
- The samples based on the religion of patients reveal that 93% of the samples belong to Hinduism.
- The data of the educational status of samples reveal that samples were graduate students of Arts & Science
- The marital status of the samples reveals that 100% were single. The types of family reveal that 82% of the samples belong to nuclear family. The number of siblings of samples stated that 46% of samples had one sibling.

The data distribution of monthly family income notifies that majority, 54%, of samples had a monthly income between Rs. 10,001 to 20,000.

Analysis of Level of Knowledge on Blood Donation of Samples

Table 10 reveals that 17% of the samples had moderately adequate level of knowledge regarding blood donation, 1% of the sample had more than adequate level of knowledge and 82% of the samples had inadequate level of knowledge.

SUMMARY AND CONCLUSIONS

This chapter summaries the major findings and recommendations for further study. The study was conducted in Ayyan Thiruvalluvar College of Arts & Science, Punjai Puliamatti, Coimbatore. 100 samples were selected according to the inclusion and exclusion criteria. It consists of demographical profile, knowledge-related questionnaires on blood donation.

Major Findings of the Study

- 98% of the samples were in the age group between 17 and 20 years, 52(52%) of samples belong to the male gender, 93% of the samples belong to Hinduism; samples were undergraduate students of Arts & Science, and 100% of the samples were single.
- 82% of the samples belong to nuclear family, 46% of the samples had one sibling.
- The data distribution of monthly family income notifies that the majority, 54%, of the samples had a monthly income between Rs. 10,001 and 20,000 and 100% of patients belong to rural area.

REFERENCES

1. <https://www.oneblood.org/about-donating/blood-donor-basics/what-is-blood/>
2. <https://www.who.int/news-room/fact-sheets/detail/blood-safety-and-availability>
3. <https://www.healthissuesindia.com/2019/10/02/bloodoation-india/>
4. Suchitra, R., Sannitha, M. L., Ravikanth, J., Anusha, G., & Abhilash, B. LOCATION BASED ONLINE BLOOD BANK SYSTEM.
5. <https://www.franhiseindia.com/education/teaching-students-the-importance-of-blood-donation.11223>.
6. Ashishkumar Nathabhai Kanani, Jitendra H. Vachhani, Shweta B. Upadhyay and Spruha K. Dholakiya (2018), Department of Immunohematology and Blood Transfusion, Vol. 3, Issue: 1, page nos. 46–51.
7. Rana, V. K., Naskar, S., & Singh, N. P. Effect of Deficient Mineral Supplementation on Blood Metabolites in Pre-Partum Black Bengal Does.
8. Rajlaxmi Nishant Kurian and Shilpi Sarkar (2017, Int. J. Nurs. Midwifery Res., Health Sci. J., 2017, 11: 1.
9. Hesamedin Askari Majdabadi, Mehdi Kahouei, Soghra Taslimi and Mahnanz Langari (2018), Electron Physician. 2018 May; 10(5): 6821 – 6828.
10. Owonikoko, K. M., Adeoye, A., Adeyemi, A. S., & Oadeniji, A. (2014). Assessment Of Blood Transfusion Practices At Caesarean Section In A Teaching Hospital In South-Western Nigeria. International Journal Of Medicine And Pharmaceutical Sciences, 4(6), 69-76.

11. Sharma, R. K.^{*}, Verma, S., Sharma, M. and Pugazhendhi, S. (2016), *Voluntary Blood Donation: Attitude and Practice among Indian Adults*. *J. Community Med. Health* 3:436. doi:10.4172/2161-0711.1000436
12. Dawit Malako, Fissehatsion Yoseph & Mebratu Legesse Bekele (2019), *BMC Hematology*, Vol. 19, Article number: 10 [A/Q: Please provide page range]
13. Al-Hindi A. I, Khabour, O. F., Alzoubi K. H. and Al-Sawalha, N. A. (2018), *J. Blood Med.*, Vol. 2018: Issue no. 9, Page nos. 145—151, DOI: <https://doi.org/10.2147/JBM.S178047>
14. Bolaji, O. S., Uthman-izobo, S. O., Ojurongbe, O., Opaleye, O. O., & Adeyeba, O. A. (2014). *Filariasis among asymptomatic blood donors in general hospital, Odan Marina–Lagos, Nigeria. International Journal of Research in Applied, Natural and Social Sciences*, 2(6), 177-182.
15. www.thebloodfoundation.org
16. www.healthline.com

AUTHOR'S PROFILE



Dr. S. PARIMALA, Research Supervisor, Vinayaka Mission's Annapoorana College of Nursing, Vinayaka Mission's Research Foundation, Salem, Tamil Nadu, India

Prof. Dr. S. Parimala completed his bachelor's degree in nursing from Padmavathi college of nursing, Dharmapuri, Post-graduation in Vivekanantha college of nursing, Thiruchengodu and pursued her doctorate from Technoglobal city university, Mehalaya. She has started of his professional career has a lecturer and became the Professor in Vinayaka Mission's Annapoorna college of Nursing, Salem.

She has rich academic experience of more than 22 years. She has done many publications in national and international journals. She has wide experience in teaching clinical nurse programs. She has sound knowledge of maternal health care services. Madam has ability to develop departmental projects She is also the member of Board of Studies of various universities in India. She has organized and contributed the papers in National and International conferences and workshops. She participated in various academic CNE and CME programs. Madam helps the students on career selection options. She conducted awareness programs, intercollegiate quiz, immunization and maternal, child welfare programs among professional nursing students. she was awarded **Best Teacher** from The Nursing Teachers, India Association.



R. DEEPA, Reserach Scholar, Vinayaka Mission's Research Foundation, Salem, Tamil Nadu, India

Mrs.R. Deepa has completed her Undergraduate degree in Nursing in College of Nursing, Madras Medical College,

Chennai, Master degree in Nursing in Adhiparasakthi College of Nursing, Melmaruvathur. She has also graduated in M.A(Sociology), Post Graduate in Hospital Management and Post Graduate in Criminology and Forensic Science from Annamalai University, Chidambaram.

She has dedicated, hardworking teacher with 15 years' diverse experience *providing compassionate, knowledgeable and professional health care teaching to students and care to patients of all age and variety of medical conditions. She has also experienced nursing instructor and talented communicator with ability to inspire others. She has strong commitment to develop the next generation of nursing talent. She has experienced* as Board of Examiner and Dissertation Evaluator in RGUHS, Bangalore, Board of Examiner in Sri BalajiVidhyabeeth University,Pondichery and Evaluation Committee member at The TamilNadu Dr. MGR Medical University, Chennai. She also has computer skills, organizer of various CNE programs, National and State level conferences, cultural and sports meet. She is taking part time classes for Diploma and UG nursing students.